



Municipal Transportation Agency

SF Transit Effectiveness Project

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**MTC Workshop
Sustaining the Region's Transit System**

10 | 21 | 2009 | SAN FRANCISCO, CALIFORNIA

Service Design and Delivery

Cost Containment

Governance and Decision-making

SFMTA Overview

- Multi-modal transportation agency
- Planner, Designer, Builder, Operator
 - 5 Transit Modes
 - Street Network, Signals & Systems
 - Pedestrian & Bicycle Networks
 - Parking Supply & Management
 - Station Area Development
 - Taxi Administration
 - Street Enforcement



Transit Service Overview

- **80 routes**
- **225 million annual boardings**
- **5 different modes**
 - Muni Metro; Historic Streetcar; Cable Car
 - Motorcoach; Trolleycoach



What is the Transit Effectiveness Project?

- **First review of Muni in a generation**
 - Jointly sponsored by SFMTA and SF Controller's Office
 - Better data than ever before
 - Extensive customer and employee input
- **Objectives**
 - Make Muni service more reliable, convenient and attractive to our customers
 - Contribute to long-term financial stability
 - Develop 5-year roadmap to transform Muni service and better meet our customer and employee needs



TEP Priority Initiatives

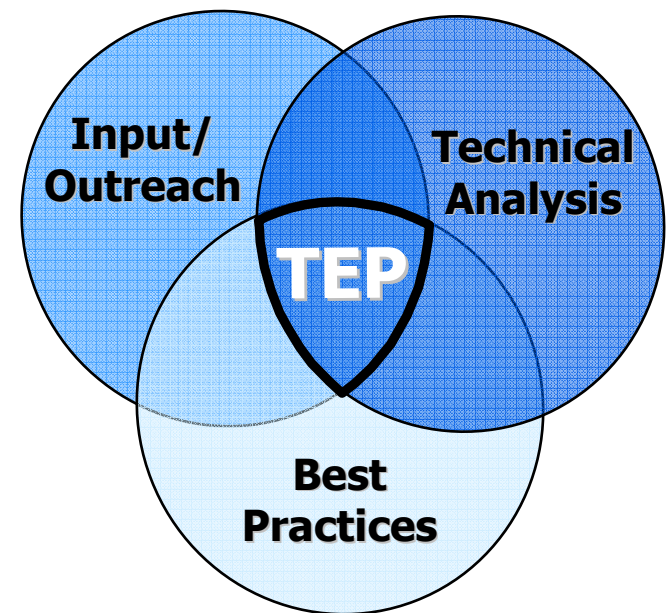
- **Improve Reliability**
 - Make service more predictable to build customer confidence before implementing proposed route changes
- **Reduce Travel Times**
 - Develop small- and large-scale strategies to reduce delay, enhance pedestrian safety, and get more service from existing resources
- **Update Muni Routes**
 - Redesign routes and adjust service to benefit the maximum number of Muni customers



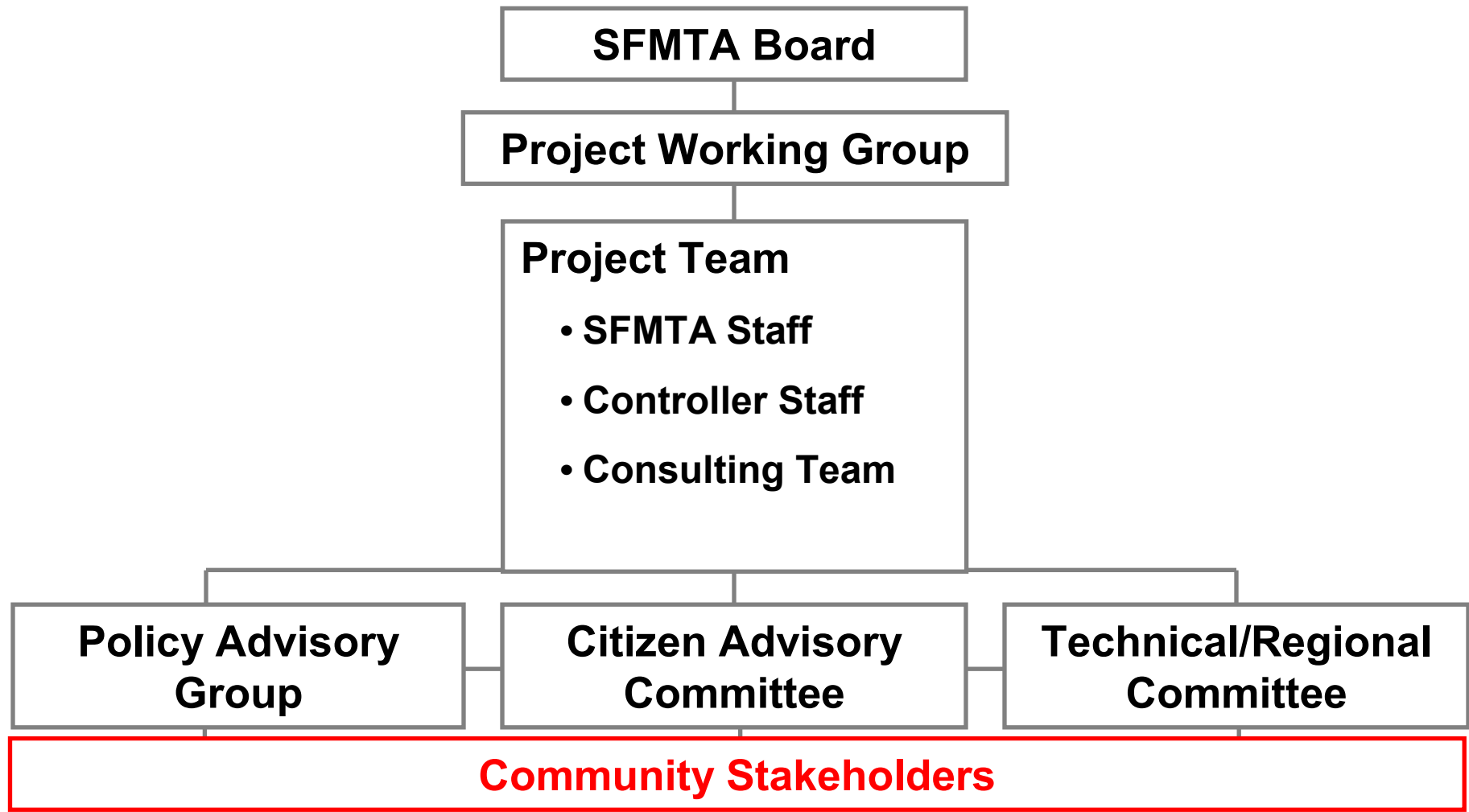
TEP Process

Emphasizes transparency in decision making

- **Technical Analysis**
 - Detailed transit route data
 - Consumer research for residents
 - Models of local and regional travel patterns
- **Input/Outreach**
 - Community workshops, special events, targeted outreach, surveys
 - Employee in-reach
 - Briefings with policymakers
 - Monthly Stakeholder Advisory Committees
- **Best Practices**
 - Peer comparisons with other large cities
 - New innovative ways to design/deliver transit service

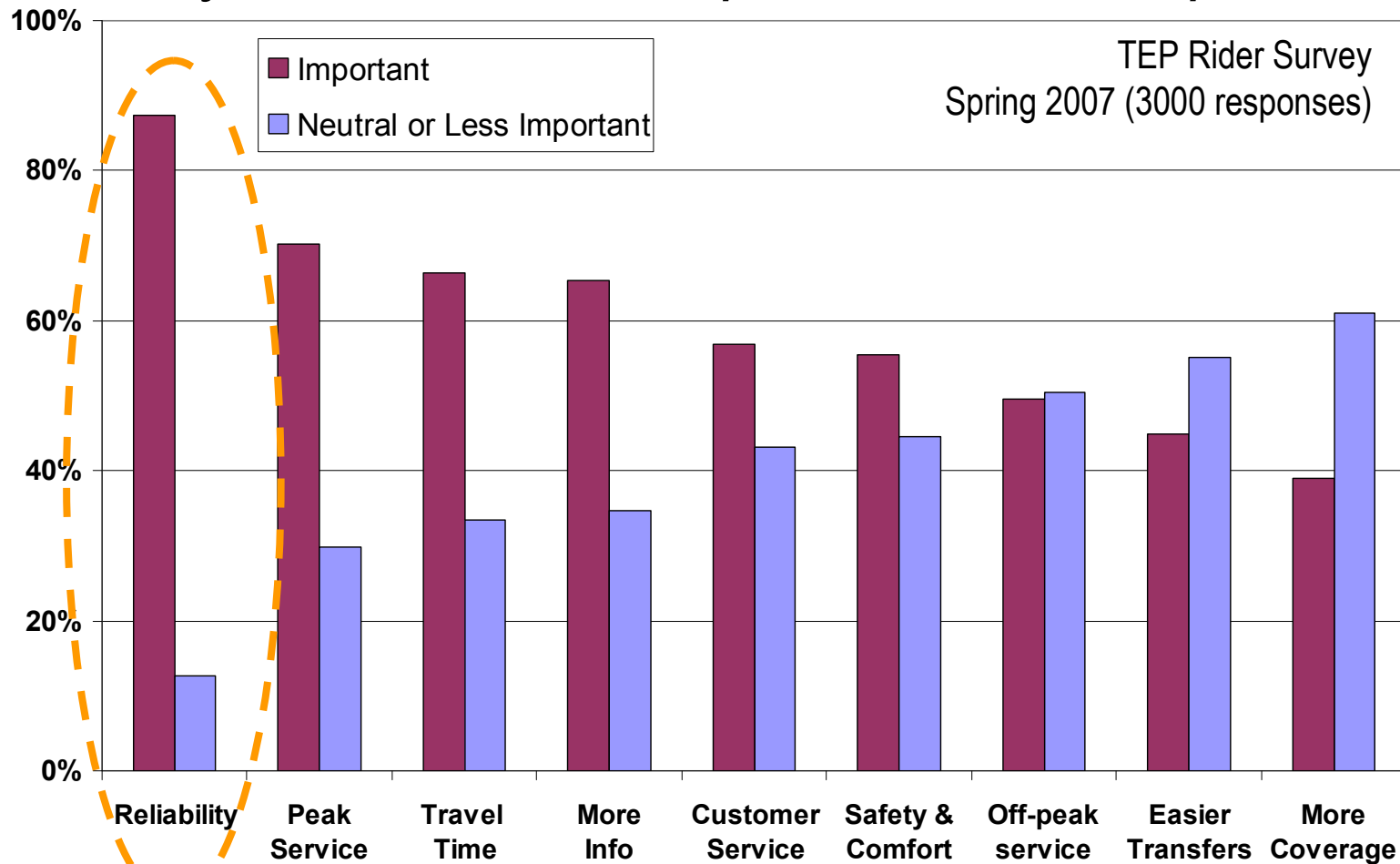


TEP Stakeholder Input



Customers Want Reliable Service

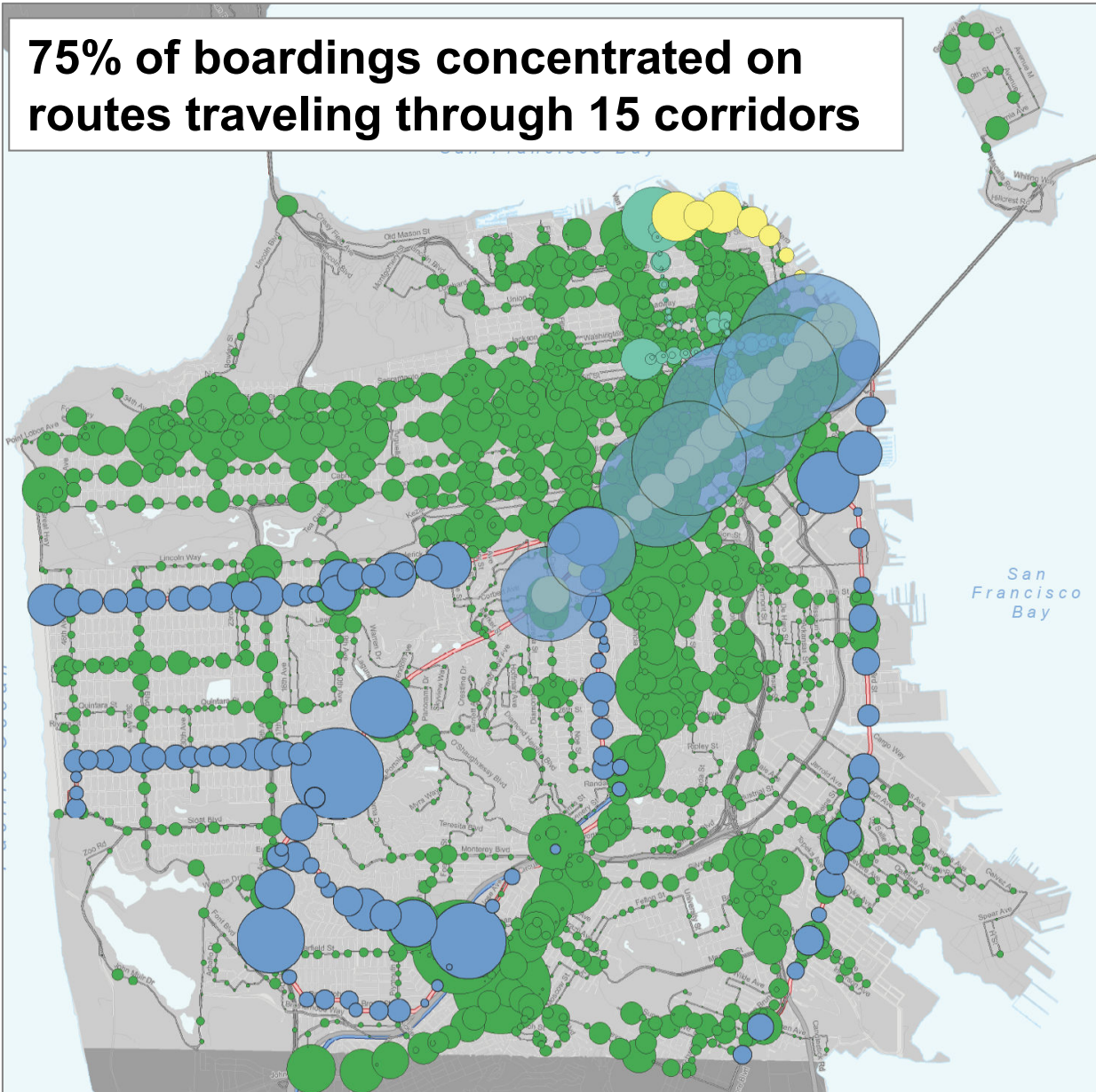
Survey Results: *How Important is it to Improve...*



Recent Reliability Investments

- Schedule adjustments
- Cross-functional teams evaluating conditions and management of busiest routes
- Line management center launched to improve vehicle spacing and reduce bunching
- Training course developed for front-line managers
- Road Call Program to minimize disruptions to service from vehicle breakdowns
- Stimulus proposals focus on bus and rail rehabilitation/state-of-good-repair

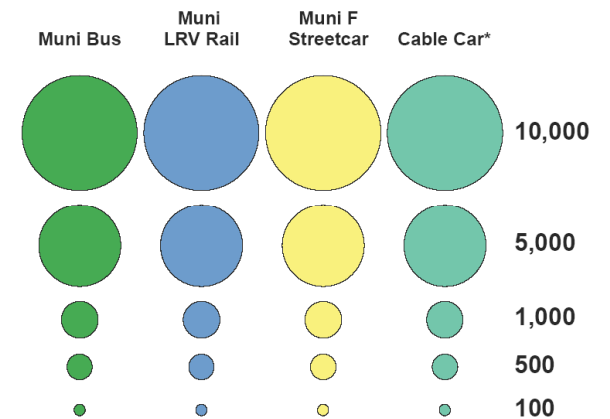
75% of boardings concentrated on routes traveling through 15 corridors



Total Weekday MUNI Boardings Post T- Line Implementation

Daily Bus Boardings Grouped by Intersection

Daily LRV & Streetcar Boardings Grouped by Station



Existing Bus Network

Muni Rail Line

BART Line

Freeway/Highway

Primary Data Sources :

SFMTA APC and Manual Ridecheck
Fall 2006-Fall 2007

Secondary Data Sources:

SFMTA, SFCTA, SFGOV, MTC.

*Note:

Cable Car data is peak season
data from August 2007.

Powell-Mason data not included.

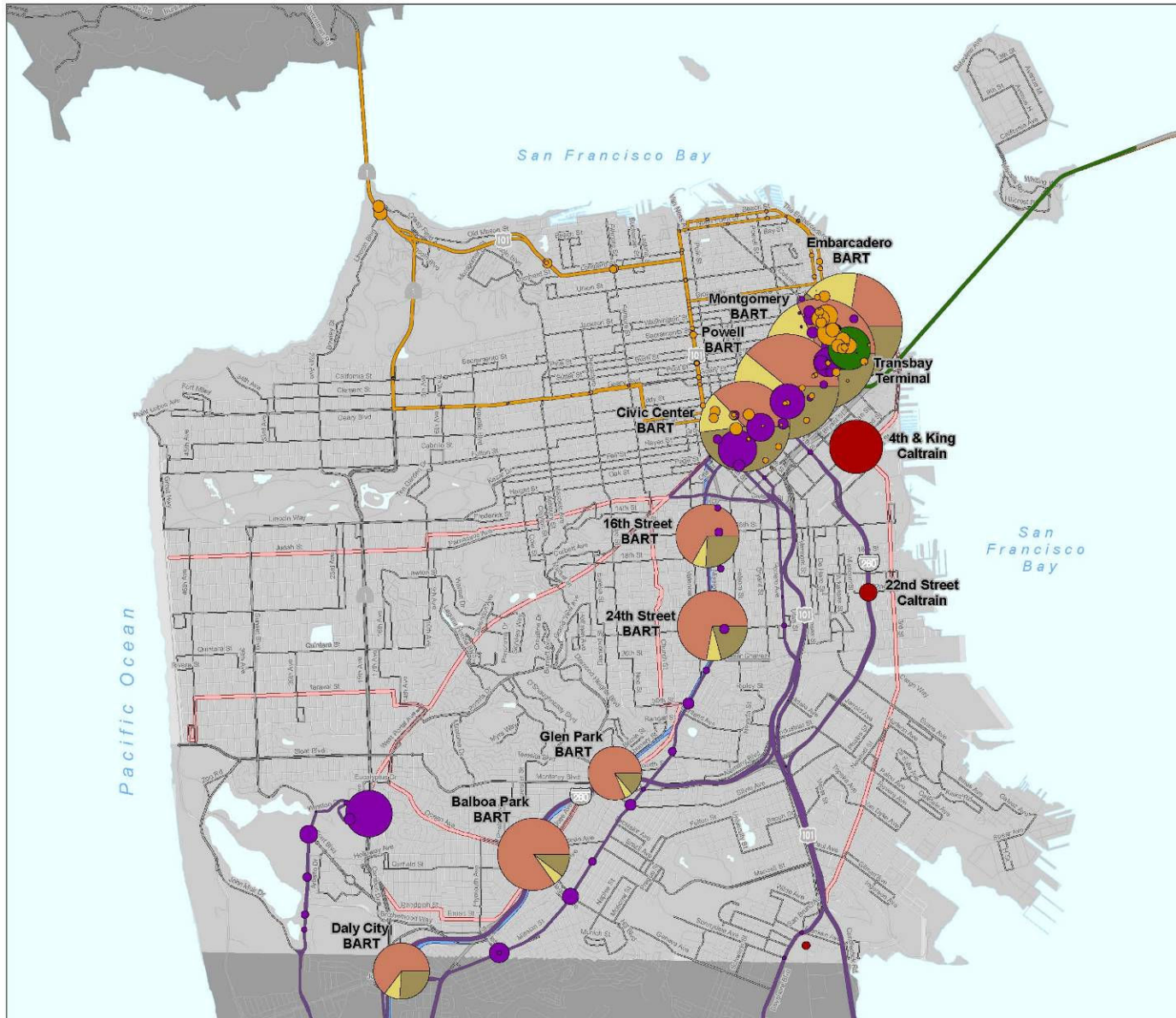
Updated:

April 2008

SFMTA

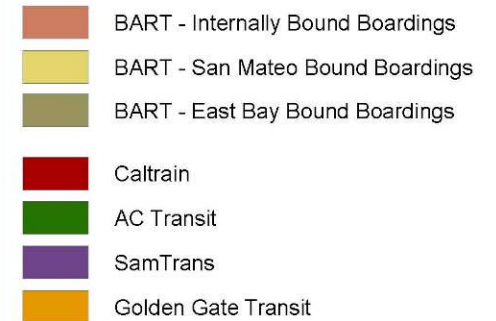
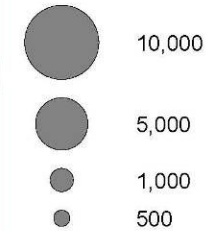
Municipal Transportation Agency





Daily Boardings - Regional Operators

Total Boardings by Stop/Station



SFMTA | Municipal Transportation Agency

Primary Data Source: AC Transit, BART
Golden Gate Transit, SamTrans, Caltrain
Secondary Data Sources: SFMTA, SFCTA, SFGOV
Date: August 2007



TEP – Service Policy Framework

Rapid Network – Heaviest ridership lines
with the most frequent service (every 5 to 10 min)

Local Network – Combine with Rapid Network to create
core network (service every 10 to 15 min)

Community Connectors – Fills gaps in coverage and
connects to core network (service every 15 to 30 min)

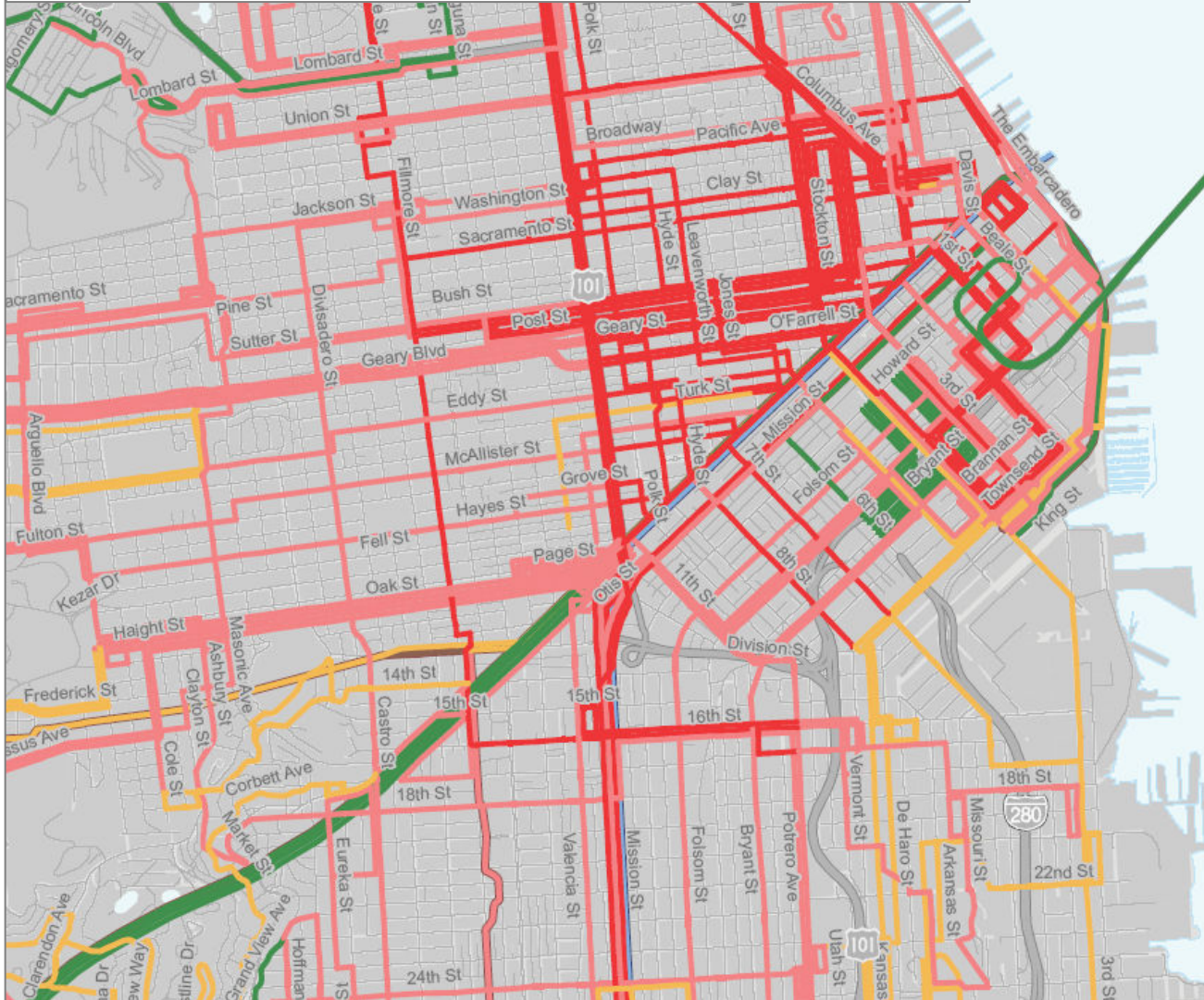
Specialized Services – Augments all day service and
addresses focused needs (includes express routes)

TEP Service Plan Highlights

- Rapid Network with premium amenities
- Expand limited-stop service
- Neighborhood-friendly fleet of smaller vehicles
- Reduced crowding on heavy ridership lines
- Improved regional connections



Slow travel times frustrate customers and increase Muni costs



Service Speed

SFMTA Bus and Rail Network

Route Segment Performance

All Day

(Miles Per Hour)

- More than 12.0
- 9.0 - 12.0
- 6.0 - 9.0
- Less than 6.0

Not Shown: Non-Loading Express Route Segments And Non-Operating Routes

Actual Operating Speed (MPH) With Stop Dwell Time

- BART Line
- Freeway/Highway

SFMTA | Municipal Transportation Agency



Data Source: SFMTA, SFCTA, SFGOV, MTC
2006-2007 (Pre-T Line)

Map Last Updated: September 2007

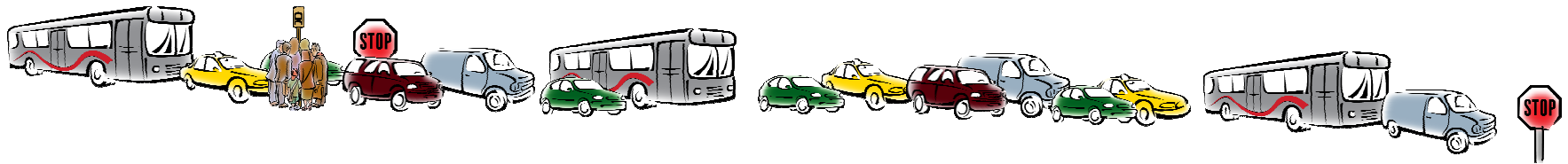


0 0.5 1 2 Miles



Bus route... 60 minute travel time

30 minutes



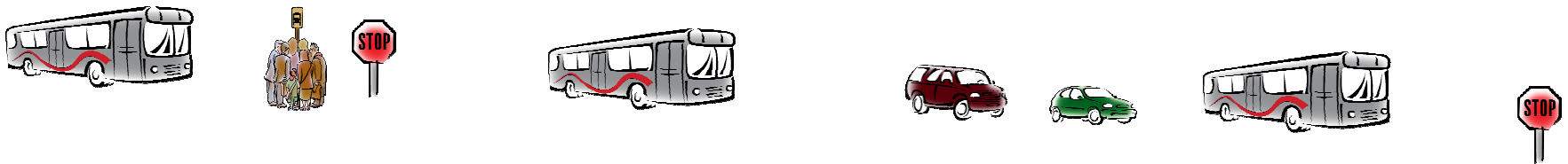
30 minutes

Round Trip Travel Time = 60 minutes

Bus every 10 minutes = $\frac{60}{10} = 6.0 \Rightarrow$ **6 buses + 6 drivers**

Reduce Travel Time and Resources

25 minutes



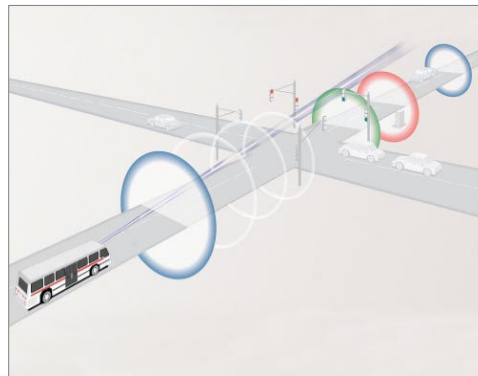
25 minutes

Round Trip Travel Time = 50 minutes

Bus every 10 minutes = $\frac{50}{10}$ = 5 buses + 5 drivers

17% decrease in cost and travel times!

Improve Operating Speed



TEP System Benefits

- **Better reliability and on-time performance**
- **Improved customer experience**
 - More accessible service on busiest routes & lines
 - Shorter wait times
 - Reduce crowding on vehicles
- **70,000 new daily Muni boardings estimated**
- **Air quality and congestion benefits**

TEP Next Steps

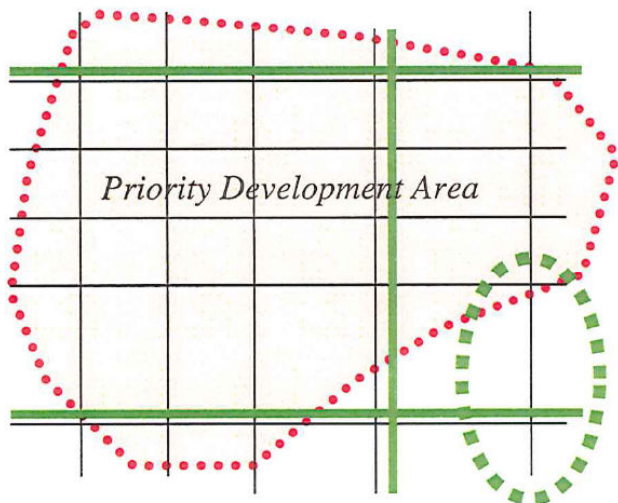
- **Implementing service reductions and enhancements informed by TEP**
- **Optimizing limited staff resources to improve reliability and on-time performance**
- **Developing 5 year TEP Implementation Plan**
 - Developing target outcomes
 - Designing travel time projects
 - Creating master schedule

Regional Recommendations

- **Emphasize data-based decision-making**
 - Use to efficiently allocate scarce resources and encourage accountability
- **Identify funding for small-scale capital projects**
 - Invest in reliability and travel time improvements
 - Invest in customer amenities at transit stops
- **Continue development of the “Frequent Service Transit Network” concept**
- **Address current deficiencies and anticipate needs in priority growth areas**

Figure 1. Three Transit Brands for Three Travel Types

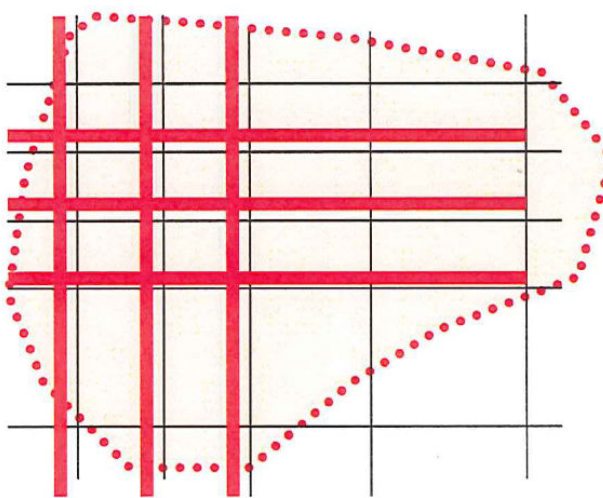
Local and Sub-Regional Travel



Basic Service Transit Network

Product Line
Community Bus
City Bus
Paratransit
Taxis
etc.

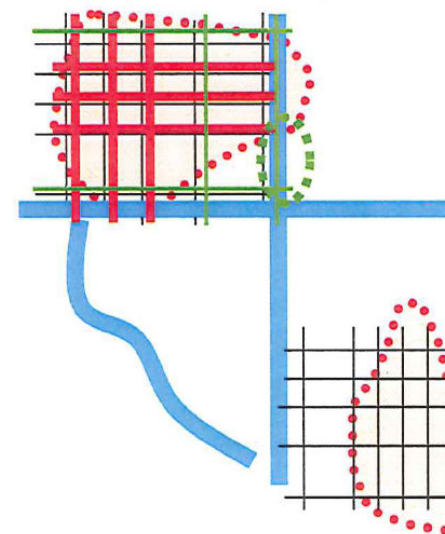
Local and Sub-Regional Travel



Frequent Service Transit Network

Product Line
Community Bus
City Bus (local stop)
Rapid Bus (limited stop)
BRT
Light Rail

Sub-Regional and Regional Travel



Line-Haul Transit Network

Product Line
Express Bus***
Ferries**
Heavy Rail*
Commuter Rail*
High-Speed Rail*

* Regional Rail Plan

** WTA Ferry Plan

*** Freeway Performance Initiative

Service Design and Delivery

Cost Containment

Governance and Decision-making

Cost Containment

- Informed service delivery decisions are paramount
- Service reductions and adjustments alone will not eclipse the projected budget shortfalls
- Bay Area transit providers on average subsidize passenger trips significantly more than other regional providers
- Need to find large-scale creative solutions to economize and optimize transit service

Build on Common Needs/Goals

- **Shared administrative services**
 - Grants
 - Finance
 - Procurement
 - Human Resources
- **Pooled regional procurements**
 - Fuel
 - Vehicles
 - Materials and equipment
 - Professional services
- **Work rule changes and other administrative costs**

Explore Ways to Integrate Systems

- Fare structure
- Service provision (regional network)
- Regional bonding capacity
- Planning
- Research and development
- Eliminate duplication and overlap in functions where possible and economical

Collaborate to Advocate

- Legislative initiatives and advocacy (state and federal)
- Funding for regional mega-projects
- Federal funding and reauthorization
- Work together to advocate for collective regional benefit

Starting the Conversation

- **Economic climate has forced this conversation**
 - Budget shortfalls
 - Service reductions and adjustments
 - ARRA/Stimulus funding
- **Ongoing difficulties will sustain the conversation**
 - Projected regional operating and capital shortfalls
 - Continued local pressure to economize and optimize
 - Continued focus on planning, connectivity and regional needs

Service Design and Delivery

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Connectivity is the Priority

- **27 Bay Area Transit Providers**
 - Light Rail
 - Commuter Rail
 - High Speed Rail (planned)
 - Buses
 - Ferries



Governance

- **High cost to administer service for 27 transit agencies**
- **Need to right-size our decision-making process given the cost, ridership and geographic reach of service**
 - Each agency has unique jurisdictional challenges in funding and service provision
 - MTC currently leads regional prioritization for federal formula funds
 - Outstanding question as to how regional governance should be structured: ridership, population, other?
- **Balance service delivery priorities with cost**

Driving Principles

- Must be willing to take a hard look at how we collectively do business
- Focused regional coordination on service delivery
- Importance of public outreach and engagement

Questions?